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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/696,729 | 10/29/2003 | Scott Freeberg | 279.652US1 | 6340 |
| 45458 7590 05/10/2011 SCHWEGMAN, LUNDBERG & WOESSNER/BSC-CRM PO BOX 2938 MINNEAPOLIS, MN 55402 | | | | |
| EXAMINER | | | | |
| HOLMES, REX R | | | | |
| ART UNIT | | PAPER NUMBER | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com
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Office Action Summary

Application No.

10/696,729

Applicant(s)

FREEBERG, SCOTT

Examiner

REX HOLMES

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,11-37 and 46-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7,9,11-13,21-24,29-37 and 46-55 is/are allowed.
- 6) ☒ Claim(s) 14-20 and 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/28/11
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/28/11 have been fully considered but they are not persuasive. Regarding claims 14 and 29, The Applicant argues that Park fails to provide a processor adapted to determine a first ventilation rate a second ventilation rate and determine a difference between the rates. Similarly, the Applicant argues that Park fails to provide a first and second sensor adapted to provide a first and second impedance signal. The Examiner respectfully disagrees. It is noted that the claims recite that the processor is adapted to determine ventilation rates and compare the difference. It is further noted that the claims recite that the sensors are adapted to provide ventilation signals. It is noted that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only require the ability or capability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. In this case the processor of Park is capable of determining ventilation rates and determining the difference and further the sensors are capable of sensing impedance signals (e.g. Col. 12, ll. 4-67).
2. Regarding claims 15-20 and 25-37, the Applicant argues that Park fails to provide the limitations of the parent claims and therefore can not anticipate the dependent claims. The Examiner disagrees for the reasons above. Therefore the rejections of claims 14-20 and 25-37 stand.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14-20, 25-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Park (U.S. Pat. 7,136,705).

5. Regarding claims 14, 25 and 29, Park discloses an implantable medical device that includes a first sensor and a second sensor (e.g. Col. 12, ll. 4-8). Each sensor provides a signal indicative of a ventilation rate (e.g. Col. 12, ll. 4-23). Park further discloses that a processor determines a rate with each signal and then takes the difference of the two signals (e.g. Col. 12, ll. 31-67).

6. It is noted that language "indicative of first ventilation rate derived from the first chamber of the heart", does not require the sensors to be in the same chamber. Further the language "indicative" does not limit the claim and constitutes functional language.

7. It is further noted that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only require the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

8. Regarding claims 15 and 26, Park discloses that at least one of the sensors is a transthoracic impedance sensor (e.g. Col. 10, line 59 to Col. 11, line 6).
9. Regarding claims 16 and 30-31, Park discloses that the system utilizes a pair of sensing and stimulation electrodes (e.g. Fig. 1).
10. Regarding claims 17-18, 27 and 35-37, Park discloses the system includes an activity sensor (accelerometer) (e.g. Col. 10, ll. 26-36; Col. 12, ll. 4-12).
11. Regarding claims 19, 28 and 32-34, Park discloses that there is a therapy circuit adapted to deliver therapy in response to the measured rates (e.g. Col. 12, ll. 28-37).

Allowable Subject Matter

12. Claims 1-7, 9, 11-13, 21-24, 46-55 are allowed.
13. The following is a statement of reasons for the indication of allowable subject matter: The subject matter for the independent claims could not be found or was not suggested in the prior art. The subject matter not found was determining a first and second ventilation rate from first and second impedance measurements and then comparing the first and second ventilation rates to see if there is a difference in combination with the other limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Park et al. (U.S. Pat. 6,928,324).- Discloses that thoracic impedance is proportional to ventilation rate (Col. 15, ll. 27-34; Col. 21, ll. 30-43). U.S. Pat. No. 4,901,725 issued to Nappholz et al., U.S. Pat. No. 4,596,251 issued to Plicchi et al., U.S. Pat. No. 5,562,712 issued to Steinhaus et al., or U.S. Pat. No. 5,562,711 issued to Yerich et al. Methods for measuring intra-thoracic impedance measurements used for determining respiration rate and minute ventilation have been proposed for use in monitoring for pulmonary congestion/edema based on evaluation of respiration rate.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REX HOLMES whose telephone number is (571)272-8827. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Niketa Patel can be reached on (571) 272-4156. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. H./
Examiner, Art Unit 3762
/Niketa I. Patel/
Supervisory Patent Examiner, Art Unit 3762